**CRITERION 3: CREATION, APPLICATION AND ADVANCEMENT OF KNOWLEDGE**

### 3.1 RESEARCH

The school shall offer instructional programs reflecting its stated mission and goals, leading to the Master of Public Health (MPH) or equivalent professional master’s degree in at least the five areas of knowledge basic to public health. The school may offer other degrees, professional and academic, and other areas of specialization, if consistent with its mission and resources.

3.1.a. The school shall pursue an active research program, consistent with its mission, through which its faculty and students contribute to the knowledge base of the public health disciplines, including research directed at improving the practice of public health.

**Overview**

**Active Research Program, Consistent with Mission**
The UNTHSC School of Public Health pursues an active research program that is consistent with the SPH and Health Science Center mission to *create solutions for a healthier community*. The research program aims to improve public health through the discovery and application of knowledge, the evaluation of programs and policies, and the communication of relevant knowledge and evidence for improving public health practice. Faculty and students collaborate to contribute to the knowledge base of public health in and across disciplines, through funded research and evaluation, publication and active dissemination of scholarly work, interdisciplinary scholarly exchange, and translation of research into practice settings.

The SPH research program is an essential part of the educational mission of the SPH. There are formal and informal mechanisms to support faculty and students in their public health research efforts within and across disciplines; to advance development and dissemination of public health knowledge; and to promote hands-on, mentored and shared scholarship opportunities for students throughout their studies. Formal mechanisms include the Texas Prevention Institute and affiliated research centers, the North Texas Health Forum, the Memoranda of Agreement with public health partners, Research Appreciation Day, the Office of Research Services, the BEST Scholarship Program, Journal Club, Research Assistantships, and Thesis and Dissertation Committees.

**Seeking and Advancing Solutions Together**
Equally important are the strong informal research mechanisms that support the mission of the SPH, which is to *create solutions for a healthier community* and our vision, which is *to be the team of choice*. UNTHSC SPH is known in the community and region as the go-to organization for testing ideas for community initiatives, e.g., *Blue Zones*, putting research skills into practice, e.g., West Nile mosquito surveillance, and evaluating innovative health improvement and behavioral health strategies. Faculty and students join with community partners to conduct environmental and epidemiologic investigations, as well as to conduct research and evaluation studies. A common model of working together is a vertically integrated research team (faculty member(s), doctoral student(s), 2nd year MPH and 1st year MPH students). This model enables faculty members to
sustain academic-community partnerships, develop student research and leadership capacity, produce scholarly work, and respond nimbly to requests from public health partners, e.g., focus group facilitation, needs assessment support, GIS work, and survey data analyses.

Here are a few examples of solution-driven research initiatives aimed at improving public health practice, and involving interdisciplinary teams of faculty and students:

- **Safe Sleep**, which aims to reduce African American infant mortality in Tarrant County;
- **Reaching Teens**, which is web-based resiliency training that is evaluated for the Mental Health Connection of Tarrant County and is in partnership with the American Academy of Pediatrics;
- **MAPIT**, an innovative web-based intervention targeting substance abuse treatment in the criminal justice system, developed and tested via a multisite randomized trial;
- **TB Control Economic Evaluation** which is in partnership with CDC and Tarrant County Public Health;
- **Telehealth-Monitoring System** for chronically-ill Medicaid patients – the initiative includes its implementation and evaluation;
- **Asthma 411**, a pilot implementation of an evidence-based school focused approach for the management of Asthma, in partnership with the Fort Worth Independent School District.

**Strategic Research Focus**

Research and scholarship in the School of Public Health are organized around a school-level research plan targeting these five areas:

- Pulmonary disease, including Airways Management (Asthma and COPD), and tuberculosis management;
- Prevention of substance abuse and other high risk behaviors;
- Cancer prevention;
- Economic evaluation; and
- Translational and community-based research.

With the solutions-focused mission of UNTHSC, the SPH is currently engaging in research on strategic planning and implementation. While continuing the targeted research effort in the five areas identified above, the SPH is (1) bringing these research activities together under the umbrella of the Texas Prevention Institute with a shared strategic research goal; (2) restructuring and improving research services, including expanding the methodological support (research methods core); and (3) engaging faculty in identifying the four or five public health challenges that SPH researchers aspire to tackle and make a difference in the next decade.

**SPH Research Strategic Plan for AY 2013 – AY 2014**

**Goal:** Strengthen our research program and capacity to engage in research related to pressing public health concerns across the lifespan, with attention to the social determinants of health and the opportunities to develop public health solutions at multiple levels (Fort Worth, Texas, national, international) and sectors of society, e.g., transportation, housing, education.
Objectives:

1. **Build research infrastructure** (AY 2013): Develop an SPH Office of Research Services (ORS) that provides proactive, user-friendly, responsive research support.  
   **Outputs:** (1) SPH-TPI research administration infrastructure (oversight by SPH Research Committee; director hired; organizational chart and reporting relationships approved; roles defined, positions approved, and staff hired; professional development and training plan); (2) workshops and training (including NIH new investigator grant writing workshop, Cayuse training); (3) an internal peer review process; (4) NIH and other grant templates (e.g., PHS 398 Resources); (5) an advisory committee; (6) an internal communication plan, including publication of quarterly *Research Insight*.

2. **Expand collaborations and partnerships** for research and evaluation that are public health solutions-focused, with particular attention to Fort Worth.  
   **Outputs:** (1) expand collaboration with Tarrant County Public Health with regard to existing and new projects identified as mutual concern regarding local public health; (2) Collaborate with the John Peter Smith (JPS) Health System (local public hospital and medical provider) in the development of the JPS Research Institute, through which joint resources could be used to investigate local delivery problems.

3. **Create an integrated research methods core** (AY 2014): Develop a methods core that includes tools and support for community-based participatory research, biostatistics, evaluation, measurement, health outcomes, data analytics, and genomics. The core will provide robust research support and methodological innovation, with particular attention to tools and methods for supporting research in health disparities.  
   **Outputs:** (1) inventory of research methods, tools and faculty skill sets; (2) Biostatistics and Evaluation Services and Training (BEST) consulting service business plan and cost center; (3) BEST sponsored workshop series on research methods.

4. **Increase visibility of SPH researchers and their contributions** (AY 2013 and AY 2014).  
   **Outputs:** (1) Web-based (Zotero) electronic repository of all publications of SPH researchers; (2) professional videos (displayed on SPH webpage, YouTube) of each faculty member’s research emphasizing “public health solutions;” (3) system for tracking all SPH research and evaluation projects and funding; Research Gate enrollment of all faculty members, linked to UNTHSC SPH faculty profile page.

5. **Promote research culture and collaboration** (AY 2013 and AY 2014) among SPH and TPI researchers and students, UNTHSC colleagues, agency and community partners, health care and public health systems.  
   **Outputs:** (1) Monthly *Works-In-Progress (WIPs)* lunch sessions; (2) Research Schmooze (SPH and UNTHSC); (3) BEST trainings in methods – statistical programming, use of secondary data sources, project management.

6. **Identify 4 to 5 public health challenges that we aspire to tackle and make a difference in the next decade** (AY 2014), e.g., mobilizing and engaging Fort Worth community partners in multi-sector approaches to promoting healthy lifestyles and creating safe and walkable neighborhoods.  
   **Outputs:** Identification of long-term solutions-focused research areas of excellence, key partners, opportunities and resources.
Research Infrastructure

Health Institutes of Texas (HIT)
http://web.unthsc.edu/research/HIT
The UNTHSC supports nine, cross-school research centers and institutes, forming the Health Institutes of Texas (HIT). HIT leverages UNTHSC’s growing expertise in public health, interdisciplinary scientific research, and health sciences training and delivery. These institutes use a common solutions-focused framework:

1. Determine/refine problem
2. Solve the problem using multidisciplinary approach to translational research
3. Implement the solution through student and provider education, prevention, etc.
4. Measure outcomes

Utilizing this framework, UNTHSC researchers and the HIT work collaboratively to improve the health of Texans by reducing disparities, developing new treatments and therapies, and improving access to care in rural and underserved communities in Texas (http://web.unthsc.edu/research/HIT, accessed August 24, 2014).

The nine HIT centers and institutes are:

- Cardiovascular Research Institute (CRI) URL:
  http://web.unthsc.edu/hscsites/CardiovascularResearchInstitute/
- Center for Fluorescence Technologies and Nanomedicine (CFTN)
  http://web.unthsc.edu/cftn/
- Focused on Resources for her Health Education and Research (FOR HER)
  http://web.unthsc.edu/research/forher/
- Institute for Aging and Alzheimer’s Disease Research (IAADR)
  http://web.unthsc.edu/research/IAADR
- Institute for Cancer Research (ICR)
  http://web.unthsc.edu/research/ifd/ICR/
- Institute of Applied Genetics (IAG)
  http://web.unthsc.edu/info/200210/forensic_and_investigative_genetics/883/institute_of_applied_genetics_iag
- North Texas Eye Research Institute (NTERI)
  http://www.nteri.org/
- The Texas Center for Health Disparities (TCHD)
  http://web.unthsc.edu/research/TPI/healthdisparities
- Texas Prevention Institute (TPI)
  http://web.unthsc.edu/research/TPI/healthdisparities

School faculty may choose to work in any of these institutes. SPH faculty members are primarily engaged with two institutes, the Texas Prevention Institute and the Texas Center for Health Disparities.

Texas Prevention Institute (TPI)
http://web.unthsc.edu/research/TPI/healthdisparities
Researchers engage in community-based participatory research (CBPR) as well as clinical and organizational primary care research in a large number of research studies and under the umbrella
of the Texas Prevention Institute, the most significant of the institutes for the School. Physically housed in the SPH, the Texas Prevention Institute (TPI) functions as a core entity for supporting, developing, and improving research and training programs. Aiming to reduce the burden of chronic disease in under-served communities, TPI researchers apply methods of community engagement, health promotion, comparative effectiveness, clinical practice, basic science, and health policy research approaches for the purpose of preventing diseases among high-risk populations. Some faculty members perform studies under the auspices of one of the two centers in the TPI, i.e., the Center for Community Health and the Center for Primary Care Research, but others work directly through the TPI.

For example, Dr. Heather Kitzman-Ulrich conducts several projects associated with the TPI. These include two National Institutes of Health funded research studies evaluating weight management programs, one in Hispanic families conducted in the YMCA, and an NIH R01 study evaluating a tailored face-to-face and online program for African American families. She is also conducting a USA YMCA funded project to evaluate community to clinic gaps related to obesity related health disparities. In addition, she conducts several student facilitated weight management programs in community centers in collaboration with the YMCA of both Dallas and Tarrant County, and with Cook Children’s Medical Center neighborhood clinics. She has recently completed an obesity prevention program and outcome evaluation of activities related to community policy for obesity prevention, as well as a community garden program that is set up within faith-based centers to improve access to healthy foods in food desert communities.

**Center for Community Health (CCH)**
[http://web.unthsc.edu/research/tpi/cch](http://web.unthsc.edu/research/tpi/cch)

Within TPI, the Center for Community Health (CCH) supports four major community health initiatives that are led by school faculty and staff:


The Breast Cancer Program is described here to illustrate the scope and magnitude of community health improvement research. Several SPH students are actively involved in this project which focuses on reducing breast cancer disparities in vulnerable and underserved populations in Dallas County, Texas. The Breast Cancer Program includes:

- The Dallas Cancer Disparities Community Research Coalition project is a $299,930 Cancer Prevention Research Institute of Texas (CPRIT) grant. The purpose of this project is to implement an innovative community-based education intervention to reduce and eliminate breast cancer disparities in the South Dallas/Fair Park area. (Project completed.)
• The Comprehensive Breast Cancer Prevention for High Risk Women in Dallas County project, funded by a $1.4 million Cancer Prevention Research Institute of Texas (CPRIT) grant, expands the ongoing work to encompass all of Dallas County. The project implements a comprehensive, integrated breast cancer prevention program, including outreach and education, delivery of screening services, follow-up navigation, and cancer-preventive behavior maintenance, targeted to the highest risk women, who are age 40 and older, in Dallas County.

Center for Primary Care Research (CPCR)
http://web.unthsc.edu/research/tpi/pcrc
The mission of the CPCR is “to improve the health of Texas citizens through interdisciplinary primary care and public health service, research, and education.” A major aspect of the CPCR is NorTex, a network of over 100 primary physicians and clinical researchers who are located in and around North Texas.

For example, Dr. Roberto Cardarelli developed a cancer screening education program for high risk cancer cluster regions in Texas. This rural health initiative was funded by the Texas Cancer Prevention and Research Institute, a state initiative funded by $3 billion dollars in bonds to support prevention and research activities by Texas investigators.

Texas Center for Health Disparities (TCHD)
The TCHD, a HIT institute, focuses on biomedical and population-based research and education aimed at identifying factors impacting health disparities in the United States. A major initiative of the TCHD is a P20 program grant funded by NIMHD. Faculty members of the SPH play key roles in the community outreach and research cores of the project. The outreach core was initially led by Dr. Kathryn Cardarelli, but, with her departure, its leadership has been assumed by Dr. Emily Spence-Almaguer. One of the three projects of the research core is led by Dr. Heather Kitzman-Ulrich. In addition to its research and community outreach activities, the TCHD presents a national conference on health disparities each year for which SPH faculty members have been organizers and presenters.

The Office of Research Services
During the 2012 and 2013 academic years, the SPH Research Committee, with strong support from Dean Kurz and Provost Yorio, proposed and implemented a new school-level research infrastructure and strategic plan. In the fall of 2012, Dean Kurz, in response to recommendations from the faculty during the summer 2012 Faculty Retreat, tasked the SPH Research Committee to recruit and hire a Research Coordinator. The SPH hired Robyn Remotigue, CRA on September 1, 2013.

During AY 2013, the SPH Research Committee, with input from the SPH faculty as a whole, developed the SPH Research Strategic Plan for AY 2013 - AY 2014, and began implementing this plan. Objective 1 in the SPH Research Strategic Plan was accomplished with creation of the SPH Office of Research Services (SPH ORS). The SPH ORS supports both the Texas Prevention Institute (TPI) and the School of Public Health. See Figure 3.1.a.1 SPH ORS Organizational Chart.

The Office of Research Services (ORS), launched in April 2014 and fully functional in September 2014, is composed of a Research Manager who oversees three Research Administrators who are trained in the areas of pre-award, post-award and compliance administration (see Figure 3.1.a.1). Cross training allows them to grow professionally, and provides adequate coverage in assisting the faculty with their research efforts. Training for ORS staff, conducted in cooperation with the
University’s Office of Grant and Contract Management, consists of training modules for stages of the life cycle of an award. In addition, ORS staff will have opportunities to participate in continuing education that is provided by the National Council of Research Administrators (NCURA). The overall goal is to have credible, resourceful ORS staff with the necessary tools to achieve their Certified Research Administrator (CRA) credentials.

The Chair of the Research Committee, Sharon Homan, PhD, provides direction to the SPH ORS and serves as the SPH representative to the ASPPH Research Section. Robyn Remotigue oversees the SPH ORS, cross-trains the staff on the pre-award, post-award and IRB aspects of grants management and support, and interfaces with the UNTHSC research offices. As of September 1, 2014, the newly created SPH ORS became fully operational, and to support its research mission works collaboratively with the Office of the Vice President for Research, the Office of Grant and Contract Management (OGCM), the SPH Research Committee, the Office of Research Compliance (OReC), the Institutional Review Board, the Office of Research Development & Commercialization, Human Resource Services, the UNTHSC Foundation, and SPH external sponsors. The SPH ORS abides by the established research policies, procedures and practices, and actively informs and assists SPH researchers to promote understanding and compliance.
Research Policies, Procedures, and Practices

Policies

The SPH is required to follow all UNTHSC research policies. The UNTHSC Office of Research Compliance (OReC) is responsible for specific components of research compliance and for University research oversight committees. This office plays a critical advisory role to faculty to help ensure they are compliant with University policies and federal regulations related to their research activity. These include policies on research conflicts of interest (RCOI), responsible conduct of research, and ethical conduct of human and animal research.

The University and the SPH recognize the potential for conflict that could compromise, or may have the appearance of compromising, a faculty member's professional judgment in conducting or reporting research. The OReC offers trainings, policies and procedures to help the faculty understand reporting requirements. Prior to submitting any disclosure, faculty members are required to successfully complete the RCOI training, which remains valid for four years. An integral part of the policy is an annual disclosure whereby faculty members regularly review their activities. The SPH Office of Research Services coordinates with OReC to ensure that faculty members are completing the necessary training prior to responding to PHS funding opportunities.

Federal regulations make it necessary that all key personnel identified in research projects complete required educational training on the protection of human research subjects. This also includes all individuals responsible for the design and conduct of the study. OReC offers online training through the Collaborative Institutional Training Initiative (CITI) which is available on the University Institutional Review Board (IRB) web site. Successful completion (passing grade) of this training is required to conduct research involving human subjects. ORS works with the faculty prior to the proposal submission process to ensure those engaged in human subject research have met the necessary requirements. Effective fall of 2013, all students must successfully complete CITI certification during their first semester.

There are also policies to support faculty development in research, as well as financial incentives for consistent attainment of research support. In terms of faculty development, the SPH allocates $1500 per year per full time faculty member to cover travel to academic conferences and training, as well as for research expenses e.g., data and software. These funds are supplemented by strategic investments from the School of Public Health through recovered facilities and administrative (F&A) costs (Policy 13.120 Facilities and Administrative Costs Recovery and Distribution Policy Statement) and other sources. This policy reallocates F&A recovered monthly on grant accounts to an institutional “local F&A recovery account.” The recovered funds are allocated as follows: Principal Investigator (PI) (10%); Dean (5%); Department Chair (5%); and Institute (5%). The PI’s F&A funds are discretionary funds to support research-related activities. The Dean and Department Chairs use the F&A returns to support research-related activities. Recent examples include: supporting faculty to participate in the use of TreeAge Pro software for decision tree and cost-effectiveness modeling; presenting work and networking at the AcademyHealth Annual Research Meeting; participation in the NIMHD Translational Health Disparities Course: Integrating Principles of Science, Practice and Policy in Health Disparities Research; and training in methods of big data. The UNTHSC Faculty Compensation Plan establishes the guidelines for compensating faculty for achieving consistent research-funded salary support at a 30% level or higher.
Faculty evaluation policies govern review of individual faculty members, including research productivity, scholarship, and trajectory. Annual faculty member review by the Department Chair includes an assessment of research productivity and scholarship, as well as an opportunity for the Department Chair to provide input and mentoring to each individual faculty member. Promotion and Tenure guidelines govern the review of faculty pre-tenure, for advancement in rank and/or tenure, and post-tenure review with regard to research productivity and trajectory. The SPH Bylaws and Tenure and Promotion Guidelines are provided in Appendix 1.5.c.1 located in the Electronic Resource File and can also be found online at: http://web.unthsc.edu/downloads/file/5177/sph_faculty_bylaws

Procedures
Faculty research activity in the School of Public Health is self-initiated. Faculty members establish their own research agendas. As research investigators, faculty members actively collaborate with colleagues within the SPH and UNTHSC, with professional colleagues in the US and around the world; and, with practitioners, communities, and organizations. The Office of Research Services (ORS) proactively seeks opportunities and resources, and identifies collaborators and community partners to support researchers and their research teams. Many faculty members in the SPH are early in their careers and/or new to the UNTHSC and to the Fort Worth region. The ORS, along with research staff in TPI and CCH, provides vital linkages for new investigators.

Faculty receive mentoring, advice and encouragement from colleagues, their Department Chairs, the ORS, the Dean's Office, the Office of the Provost, the Office of the Vice President for Research, and the UNTHSC Division of Research & Innovation. This arrangement, which provides academic freedom, emphasizes the commitment of faculty to the goals of the institution. Efforts are made to keep faculty apprised of current research funding opportunities. In addition, there are opportunities to collaborate campus-wide as well as in the community. The Health Institutes of Texas (HIT) are open to collaboration, frequently seek expertise in public health, and are committed to interdisciplinary scientific research. These institutes provide an innovative way to translate information and research into new models of prevention, health care and training. Overall, this places the SPH in an interdisciplinary environment in which faculty members can generate new research ideas. Students are actively engaged in research with faculty mentors in the SPH, as well as in the UNTHSC.

Practices
The Research Manager position was created by the SPH Research Committee in response to requests made by faculty for assistance in the area of research. The Research Manager was charged with using the first three months for discovery and data gathering. Time was spent on taking an inventory of SPH tools and on ascertaining what we have in place in regards to resources for assisting faculty. Time was also spent reaching out to various departments and units on campus to better understand available resources to our faculty. However, individually meeting with faculty proved to be the most valuable time spent during the "discovery." Faculty shared their specific research interests, desires, and recommendations regarding ways to maximize their success in research. More importantly, some faculty shared their vision of a research structure that would support and elevate the SPH in research. This information informed the work of the SPH Research Committee in developing the SPH Research Strategic Plan for AY 2013 - AY 2014.

Since the addition of the Research Manager, new practices have been instituted to engage faculty in research and to get them excited about possibilities to collaborate. More importantly, opportunities have been created for SPH faculty to get to know each other better and to learn about each other's research. Research Insight is a quarterly publication, two-pages in length, highlighting upcoming
SPH research events that lists faculty members who have submitted proposals along with their titles and funding agency. *Works in Progress (WIPS)*, offered monthly, is a one hour session that provides faculty members the opportunity to present their research proposal and the chance to receive candid feedback from their peers. Many take this opportunity to present before submitting large grant proposals in response to a funding announcement. Following the Yale School of Public Health’s model of *Research Schmooze*, which is a method that facilitates new collaborations among faculty, the SPH hosts research schmoozes for the faculty. For example, the first event was held off campus and offered pre-arranged meetings with researchers, gourmet pizza and ice cold beverages, and the opportunity to share research ideas. Information concerning federal and national funding opportunities is made available weekly to the faculty through email. Feedback from the Schmooze events has been overwhelmingly positive so this will be a repeat offering. A recent endeavor by the SPH is the production of *Research for Solutions in Public Health* videos. We are working with our University Marketing & Communications to produce video clips with faculty showcasing their research areas and projects. We help the faculty by providing a simple script that gives them flexibility to explain their research projects. These videos will demonstrate how our research makes a difference and how it impacts the communities. It also builds awareness of our work to attract future students, as well as raise awareness in the community. To answer the needs of our junior faculty, a two-day *Grant Writing Workshop* was hosted by the SPH that will focus on the basics of writing and NIH K awards. To build on the writing, we are offering *Writing Days* where we provide a quiet, comfortable designated writing space two days a week. This is a chance to dust-off proposal drafts, develop ideas, and collaborate with fellow faculty members. Coffee and tea are provided too.

*Research Appreciation Day (RAD)* is an institutional tradition encompassing medicine, public health, pharmacy, the health professions, and basic science. The program provides an opportunity for students and faculty to share their research efforts with the campus community and the public. RAD also encourages the development of joint research projects and increases the community’s awareness of the outstanding quality of research conducted at the University. Many of our SPH students have participated in RAD poster and oral competitions, and have been selected by the panel of judges to receive top awards in their category. RAD is further discussed in Criterion 3.1.e.

### 3.1.b. Description of current research undertaken in collaboration with local, state, national or international health agencies and community-based organizations. Formal research agreements with such agencies should be identified.

The SPH collaborates with multiple health agencies and community-based organizations at the local, state, and national levels in conducting record-based and intervention research. A limited amount of international research is conducted. Formal and informal agreements support these efforts. An identification of the level of school research for all projects is presented in section 3.1.c. In the section that follows, we emphasize research that is based on interventions regardless of the intended impact level of the research.

As an institution focused on the mission of solutions for a healthier community, the School has its most extensive involvement at the local level. This involvement addresses several community problems including cancer prevention, infant mortality, obesity, childhood asthma, and mosquito control. As noted above, school faculty members are actively engaged in breast cancer prevention initiatives in Dallas, which have begun expansion to Fort Worth and Tarrant County. These programs involve several community organizations through a Community Advisory Board, as well as community centers and religious groups. The issue of infant mortality is addressed through an SPH initiative, Healthy Moms-Healthy Babies-Healthy Community (H3) which resulted from one of
the annual North Texas Health Forums (see Section 3.2: Service). H3 brings together more than 40 community organizations to create interventions based on information derived from focus groups and a concept mapping process. The Safe Sleep project mentioned above is an example of these interventions. Obesity, especially childhood obesity, is a community concern that the SPH has addressed through interventions in both the Dallas area and Tarrant County. These programs are often focused on weight management in families, especially in African American and Hispanic populations. The rate of diagnosed childhood asthma in the six counties of the western metroplex is twice the national average. Through the Asthma 411 program, faculty are working with school districts to create a structure in which each child has an asthma action plan and a physician link to allow immediate action by the school nurse. A final example of these community relationships is the West Nile mosquito control study conducted by the Department of Environmental and Occupational Health Science in conjunction with Tarrant County Public Health. This program collects mosquitoes to identify the patterns of spread and to create interventions to address effective mosquito control.

School faculty members have also been active at the state and regional levels. Dr. Sharon Homan has been the evaluator for the Mountain States Genetics Regional Collaborative. The core of this work is to identify family history tools, the barriers to their use in medical homes, and a process for their greater integration into medical practice in these settings. In addition to the local efforts to address asthma that are mentioned above, school faculty members also have addressed this condition through the Texas Environmental Health Initiative. Prevalence estimates of asthma in children living near Superfund sites have been developed for comparison to estimates for other parts of Texas.

At the national level, two major areas of activity have occurred. Dr. Thad Miller has worked with the CDC to increase the efficiency of TB control programs. This work uses economic evaluation methods to improve the allocation of resources and to predict the progression of disease. Second, Dr. Scott Walters has used motivational interviewing theory and interactive technologies to address problems of parolees, dual diagnosis Medicaid patients, and veterans. This work is conducted with funding from the National Institute for Drug Abuse, the Centers for Medicare and Medicaid Services, and the Department of Veterans Affairs.

Finally, our most prominent international research was conducted in conjunction with the Technische Universitat in Berlin, Germany. This records based work considers the macro-level impact of tobacco use on age specific rates of cardiovascular disease, chronic obstructive pulmonary disease, and lung cancer.
3.1.c. A list of current research activity of all primary faculty identified in Criterion 4.1.a., including amount and source of funds, for each of the last three years. These data must be presented in table format and include at least the following information organized by department, specialty area or other organizational unit as appropriate to the school: a) principal investigator, b) project name, c) period of funding, d) source of funding, e) amount of total award, f) amount of current year’s award, g) whether research is community based and h) whether research provides for student involvement. See CEPH Data Template 3.1.1; only research funding should be reported here. Extramural funding for service or training/continuing education grants should be reported in Template 3.2.2 (funded service) or Template 3.3.1 (funded training/workforce development), respectively.

Table 3.1.c.1, located in the Electronic Resource File - Appendix 3.1.c.1, details the funded research activity of primary faculty in fiscal years 2011, 2012, and 2013. Table 3.1.c.2 below provides a summary of this research activity.
### Table 3.1.c.2: Summary of Research Activity FY 2011-2014 *(CEPH Data Template 3.1.1)*

<table>
<thead>
<tr>
<th></th>
<th>Behavioral and Community Health</th>
<th>Biostatistics</th>
<th>Epidemiology</th>
<th>Environmental and Occupational Health</th>
<th>Health Management and Policy</th>
<th>Dean, SPH</th>
<th>School of Public Health</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Number of SPH Awards</strong></td>
<td>63</td>
<td>16</td>
<td>31</td>
<td>11</td>
<td>47</td>
<td>1</td>
<td>1</td>
<td>170</td>
</tr>
<tr>
<td><strong>Total Dollar Amount of SPH Awards</strong></td>
<td>$6,447,074</td>
<td>$788,848</td>
<td>$5,726,374</td>
<td>$700,547</td>
<td>$10,885,283</td>
<td>$76,569.00</td>
<td>$60,000.00</td>
<td>$24,684,695</td>
</tr>
<tr>
<td><strong>Community-Based Projects</strong></td>
<td>30</td>
<td>3</td>
<td>19</td>
<td>2</td>
<td>7</td>
<td>1</td>
<td>0</td>
<td>62</td>
</tr>
<tr>
<td><strong>Projects Involving Students</strong></td>
<td>19</td>
<td>9</td>
<td>18</td>
<td>7</td>
<td>24</td>
<td>0</td>
<td>0</td>
<td>77</td>
</tr>
</tbody>
</table>
3.1.d. Identification of measures by which the school may evaluate the success of its research activities, along with data regarding the school’s performance against those measures for each of the last three years. For example, schools may track dollar amounts of research funding, significance of findings (eg, citation references), extent of research translation (eg, adoption by policy or statute), dissemination (eg, publications in peer-reviewed publications, presentations at professional meetings) and other indicators. See CEPH Outcome Measures Template.

Outcome measures and targets for research are presented in Table 3.1.d.1. All reported targets were established in conjunction with the HSC Provost.

Table 3.1.d.1: Outcome Measures and Targets for Research

<table>
<thead>
<tr>
<th>Outcome Measure</th>
<th>Target</th>
<th>2011-2012</th>
<th>2012-2013</th>
<th>2013-2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total ongoing extramural research funding</td>
<td>Varied Targets by Year (All reported targets were established in conjunction with HSC Provost)</td>
<td>$8.7 million</td>
<td>$6.9 million</td>
<td>$6.7 million</td>
</tr>
<tr>
<td>Dollar value of grant applications submitted annually</td>
<td>Varied Targets by Year (All reported targets were established in conjunction with HSC Provost)</td>
<td>$33 million</td>
<td>$21 million</td>
<td>$24 million</td>
</tr>
<tr>
<td>Total number of unduplicated peer-reviewed publications (published/in press)</td>
<td>50 publications each year</td>
<td>83 publications</td>
<td>27 publications</td>
<td>55 publications</td>
</tr>
</tbody>
</table>

The decline in publications over the past two academic years is a function of three factors. First, our primary emphasis over the past five years has been to increase grant and contract funding as the base for expanded research. This has been successful. In addition, faculty research shifted to an emphasis on community based participatory research projects, which do not result in as many immediate publications as studies based on existing data sets, which had been more typical among faculty. Finally, the School has experienced an increase in the number of young faculty members who are beginning research studies and the departure of two senior faculty members.

3.1.e. Description of student involvement in research.

Student involvement in research occurs or is facilitated through: (1) work on faculty projects (2) course requirements, (3) the BEST Scholarship Program, and (4) participation in the UNTHSC Research Appreciation Day or other professional meetings.

Faculty Research Projects
Student participation in faculty research is presented in Table 3.1.c.1 located in Appendix 3.1.c.1. As the table illustrates, 41 students participated in FY 2011, 27 students in FY 2012, 59 students in FY 2013, and 68 students in FY 2014. As the amount of our research has increased over the past
seven years, the number of students who have had the opportunity to be engaged in these research programs has also increased. Moreover, this table indicates that this participation is spread across the departments of the School. Specifically, 19 projects in the Department of Behavioral and Community Health engaged students, nine projects in the Biostatistics, 18 projects in Epidemiology, six projects in Environmental and Occupational Health Sciences, and 24 in Health Management and Policy.

Course Based Research Activity
The primary courses in which students engage in research are the MPH field experience (four letter department code 5297), the DrPH residency (PHED 6397), and the PhD dissertation (four letter department code 6395). Research conducted through the MPH field experience is frequently through a community intervention conducted by an agency or an evaluation of a project that is ongoing and engages the student. These activities do not constitute formal hypothesis testing but, rather, practice-based research that provides evidence for the agency and, perhaps, a wider audience. As a requirement of the practice experience, each MPH student produces a poster and participates in a refereed poster session attended by students, faculty, and practitioners. For example, three students performed their field experience in India, working with two school faculty members and a CDC Division of Tuberculosis Elimination (DTBE) staff member to conduct an evaluation of the national TB control program in India. The students met with health care professionals at all levels of the Indian health care system to collect data about how TB control is conducted in India. They also prepared and delivered a formal presentation of their work as part of the requirements for the field experience. The DrPH residency requires a project that may again constitute practice-based research. The basis for these projects may be the application of existing evidence to create an intervention or the development and implementation of a new practice to create evidence for an agency’s future action. For example, a DrPH student created the database for a county Fetal Infant Mortality Review program, which was then used as the basis for program development and decision making by the inter-professional council that oversaw the FIMR. Finally, dissertations in the PhD program all require systematic hypothesis testing based on existing or collected data that leads to discovery of new knowledge and that must be of publishable quality.

Twelve additional courses and one activity engage students in research activity.

- In **HMAP 6350: Advanced Health Economics** and **HMAP 6380 Health Service Research I**, students are requested to perform a literature review, identify and develop testable hypotheses, analyze data (using public data and Stata software) and write 10-page final report.
- In **BACH 5340: Community Assessment and Program Planning** students do research on priority areas in Tarrant County, designing an intervention based on the objectives of Healthy People 2020.
- In **PHED 6316: Advanced Program Design and Evaluation for Public Health Practice**, students do research on the community, designing an evaluation plan for a community health intervention.
- In **BACH 5314: Research Methods**, students develop a self-report survey to evaluate a behavioral health outcome using a theoretical framework. Students collect data on 20 individuals with the survey, and then enter, score, and calculate basic statistics in SAS. A manuscript and oral presentation are developed from the results.
- **BACH 5350: Community Health Program Evaluation**: Each semester a community-partner organization is invited to participate in an empowerment evaluation process with the class as a whole, as well as with a subset of students who use the project for their service learning requirement. The empowerment evaluation model includes a series of
dialogues with stakeholder groups and ends with evaluation products co-developed with the organization.

- In **BACH 6310: Qualitative Research Methods**, students develop a qualitative focus group study to evaluate a behavioral health condition based on a theoretical framework. Students are required to conduct one focus group with at least 5 individuals, or 5 individual interviews. Data are transcribed and entered into N Vivo where students use Classic Content Analysis to evaluate themes and frequencies. Results are used to develop a manuscript and oral presentation (structured in a conference format) to the class.

- In **PHED 6314: Methods for Public Health Studies 1** and **PHED 6118: Methods for Public Health Studies 2**, PhD and DrPH students taking the two courses in sequence in consecutive semesters submit a manuscript to a peer-reviewed journal. In the first semester, the students develop a research question, find a data source, and write the introduction and methods sections of the paper. In the second semester, the students conduct the analysis, write the results and discussion sections, and submit to a journal.

- **BIOS 6320: Biostatistical Research and Consulting**. Students are required to participate in research and consulting projects, as well as to produce a variety of deliverables (at least one per student) including research reports, posters, and data analysis plans. Each student needs to prepare poster for RAD. Some posters also submitted to John Peter Smith Hospital Research Day.

- **EPID 5314: Applied Data Analysis in Epidemiology**. Each student works in a team of 3-5 students to design an epidemiologic study using the National Survey of Children’s Health data, submit DUA and IRB protocols, develop quality assurance plan, document SAS code, obtain peer reviews and prepare a manuscript for submission for a specific journal.

- **BIOS 5300: Principles of Biostatistics**. Each student is required to do CITI training. Students do secondary analyses of data from a published study of a classic public health problem, e.g., the El Paso ASARCO pediatric environmental health study, and are required to write research report, document and submit annotated SPSS syntax, and do an oral presentation. The oral presentation includes the research question, methods and findings, as well as discussion of public health policy and the ethical implications of findings.

- Finally, outside of the formal curriculum, one faculty member has formed a weekly research group for students on the topic of aging. Participants are required to submit an abstract for the Texas Public Health Association meeting and are encouraged to produce a product that can be presented at a national meeting or published in a peer reviewed journal.

**BEST Mentored Research Scholarships**
One month prior to the start of the fall and spring semesters, the Biostatistics and Evaluation Services and Training (BEST) Center sponsors a competition for BEST Mentored Research Scholarships, supported by funds donated by faculty members from consulting, project funds, and departmental funds. The competition is open to any MPH student that meets the scholarship criteria. Between seven to fifteen BEST scholarships are awarded each semester. The competition is formal, requiring a student essay, polished resume and CITI certification, as well as strong academic record and practical research skills. The SPH Scholarship Committee (outlined in Criterion 1.5.a) conducts the review, selects scholars and submits their recommendations to the UNTHSC Scholarship Committee for consideration of in-state tuition awards to accompany the $1000 scholarship. The scholars commit to work with a faculty mentor for about 75 hours (roughly 4 to 5 hours/week) during the semester. Students typically produce a scholarly product, e.g., meta-analysis publication, as well as hone their research skills, e.g., use GIS to produce maps for the Komen Foundation, analyze the NSCSHCN national survey data for the Mountain States Genetics Regional Collaborative, and develop logic models for the evaluation of the Second Chance Mentoring
Program. BEST scholars benefit from mentoring, as well as from opportunities such as presenting at a professional meeting, learning practical skills such as how to develop a Scope of Work or manage a project for a client. Seven BEST Scholarship awards were awarded in FY 2013, eight scholarships were awarded in FY 2014, and 13 scholarships were awarded in FY 2015. The list of best scholars is provided in Appendix 3.1.e.1 located in the Electronic Resource File.

Student Research Posters and Presentations
Students are also highly encouraged to submit posters or presentations to Research Appreciation Day (RAD), a UNTHSC-wide competition, as well as to other forums. RAD provides students with an opportunity to present their research to a panel of judges who select prize winners from each school. Students submitted 22 posters or presentations for the 2013 competition and 27 posters or presentations for the 2014 competition. Appendix 3.1.e.2 in the Electronic Resource File provides a list of the student RAD submissions for the last 2 years. Students also frequently co-author manuscripts and submit posters to professional societies. For example, 10 presentations and posters were presented by students during the 2013 American Public Health Association and 9 were presented during the 2014 meeting.

3.1.f. Assessment of the extent to which this criterion is met and an analysis of the school’s strengths, weaknesses and plans relating to this criterion.

This criterion is met.

Strengths:
The SPH has developed and maintained a strong and productive research program. This program focuses primarily on health issues in the local community, a focus that is consistent with the mission of the School and the Health Science Center. In addition, the School has developed a research infrastructure through the Office of Research Services which links the Health Science Center emphasis on the Health Institutes of Texas, specifically the Texas Prevention Institute, with the strategic plan for research of the School. This structure allows the School to create a strong foundation for the advancement of the scholarship of our faculty, especially our large number of young faculty, while identifying research interests that emphasize the expertise of our existing and future faculty members.

Weaknesses:
To fund the Office of Research Services, contributions from the School and the Provost’s Office have been needed. The School and the Texas Prevention Institute must find external support through philanthropy by working in conjunction with the Health Science Center’s Development Office.

The SPH has also had a reduced number of publications over the past two academic years. Our primary emphasis over the past five years has been to increase grant and contract funding as the base for expanded research. This has been successful. The School must now find ways to address this issue as community based projects are completed and as young faculty members begin to receive the results of their current research.
**Plans:**
Our plans for the future are articulated in the strategic plan for the SPH, which was developed by the Research Committee and is outlined in section 3.1a. During FY2015, we will emphasize the identification and development of research groups who, through collaboration within the SPH or across schools, can expand our research and service activities in areas of local, state, or national need, building on the established expertise and scholarly record of our faculty and staff. The Health Science Center is increasing its emphasis on the Health Institutes of Texas. Development of these groups is consistent with this increased emphasis and will allow greater Health Science Center support of school research and service activities.
3.2 SERVICE

The school shall pursue active service activities, consistent with its mission, through which faculty and students contribute to the advancement of public health practice.

3.2.a. Description of the school’s service activities, including policies, procedures and practices that support service. If the school has formal contracts or agreements with external agencies, these should be noted.

The School of Public Health was established in response to community requests for a local school of public health that would address local, state and national public health problems, and hence service has always been an essential component of the School’s mission. Our faculty, students, and staff are engaged in a wide range of professional and community service projects, volunteer activities, and institutional collaborations. For faculty members, there has been significant engagement in these activities since the School’s inception. The past three years of this engagement is illustrated in Table 3.2.a.1 below. The detailed list of service activities is discussed in Criterion 3.2.c and a full listing of faculty service activities is outlined in Appendix 3.2.c.1 located in the Electronic Resource File.

Table 3.2.a.1: Percent of Faculty Participating in Service by Category, 2012-2014

<table>
<thead>
<tr>
<th>Service Category</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of faulty participating in editorial and review activities for journals and agencies</td>
<td>83%</td>
<td>80%</td>
<td>77%</td>
</tr>
<tr>
<td>Percentage of faculty engaged in professional consulting and training</td>
<td>41%</td>
<td>36%</td>
<td>30%</td>
</tr>
<tr>
<td>Percentage of faculty participating in professional organizations</td>
<td>100%</td>
<td>100%</td>
<td>97%</td>
</tr>
<tr>
<td>Percentage of faculty participating in community service activities</td>
<td>70%</td>
<td>72%</td>
<td>67%</td>
</tr>
</tbody>
</table>

Our school formally supports service involvement through its policies, procedures, and practices, including (a) its promotion and tenure guidelines that emphasize service, (b) an annual "Service Award" to recognize the faculty member who contributed most to service, and (c) recognition in faculty workload expectations by both the HSC and the School that faculty members will spend a percentage of their time in service activities.

Formal Agreements and Contracts

Formal agreements and contracts related to service may also be viewed as research activities. This occurrence is especially true of evaluation projects for local, state, or national agencies. Faculty members often agree to do these evaluations to support the agencies and to provide students with an opportunity to practice evaluation skills learned in courses. The support of these projects by faculty occurs as significantly reduced requests for funding and little or no indirect cost recovery, in
most instances. Student participation is often structured through the BEST program which is discussed in Criterion 3.1.e. A list of these all funded research projects is provided in Criterion 3.1.c.

Evidence of another approach to the school’s commitment to the community is demonstrated through its participation and funding of the Hispanic Wellness Fair (HWF) over the past 15 years. This is a county wide community event that the SPH has proudly sponsored since its inception in 1999. This event provides faculty, staff, and students the opportunity to collaborate with non-profit health organizations and hospitals to plan the fair and participate by volunteering the day of the event. The HWF, whose goal is to provide access to prevention and health promotion services and information to those who cannot afford it, is held every year in August. Since its inception, the HWF has grown gradually, totaling over 100,000 people in attendance since 1999. The Hispanic Wellness Fair’s main objective is to introduce the Hispanic population to the community’s health resources and to break the barriers of communication by introducing health services to participants and by building trust among the providers and those in need.

The Salud para Su Corazon program advanced the service component of the School by training and placing *promotores* in areas of Fort Worth that have high numbers of Latino citizens. *Promotores* are lay health workers who provide health information and education. Many of these informal collaborations have been sustained and grown into formal collaborations for several objectives, such as sponsoring students for field experiences. Listed below are a few of the organizations with which formal agreements were established.

- Alzheimer’s Association North Central Texas Chapter
- Catholic Charities Diocese of Fort Worth
- Dallas Independent School District (DISD) Health Services
- Diamond Hill Health Center
- Fort Worth Housing Authority at Hunter Plaza
- Near Northside Community Center
- Tarrant County Public Health Department

At the state level, the School has established a formal agreement over the past three years with the Texas Department of State Health Services to support the development of local health departments for Public Health Accreditation Board (PHAB) accreditation. The agreement has resulted in the development of a Toolkit website; a master plan for accreditation of local departments; facilitation of contacts between departments and colleges, universities, and health care providers; and placement annually of three to seven MPH graduate fellows, who work in the department for a three month period.

In addition, all MPH and DrPH students must complete a practice experience or residency, respectively, at a health agency, hospital, or other public health-related organization in partial fulfillment of their graduate degree requirements. Students perform many valuable services to the community through these practice and residency experiences. Over 60 community sites are committed to providing SPH students the opportunity to work with their agency and enhance their public health skills. **Appendix 2.4.a.2** displays the list of organizations in which the MPH practice experiences and the DrPH residencies have occurred over the last three years.
**3.2.b. Description of the emphasis given to community and professional service activities in the promotion and tenure process.**

The promotion and tenure guidelines were revised in 2010 to clarify expectations and to provide additional guidance with respect to research, teaching, and service. As part of the third-year review, junior faculty are asked to provide a narrative of their service to the school, the university, the profession, and the public health community, including their plans for service over the next three years. Service is also an important criterion for tenure and promotion from Assistant to Associate Professor, and from Associate to Full Professor.

As stated in the Guidelines for Promotion and Tenure for Assistant to Associate Professor, professional and community service can be categorized as follows: (1) committee assignments at the School and University level; (2) responsibilities for directing School programs; (3) developing new and cooperative programs; (4) designated administrative responsibilities; (5) serving as a consultant to professional groups; (6) leadership in national and regional professional associations; (7) editorial service to nationally recognized peer reviewed journals or scholarly publications; (8) serving as a professional consultant to public health groups or constituencies; and, (9) serving on community boards and contributing to community organizations. For promotion to Full Professor additional criteria include: holding positions of officer/director on advisory, review or editorial boards or national and international professional societies; awards and prizes; and other notable academic achievements including the organization of national/international symposiums or meetings, development and/or directing of new and cooperative programs, and chairing or showing major impact on institutional committees and community activities.

---

**3.2.c. A list of the school’s current service activities, including identification of the community, organization, agency or body for which the service was provided and the nature of the activity, over the last three years. See CEPH Data Template 3.2.1. Projects presented in Criterion 3.1 should not be replicated here without distinction. Funded service activities may be reported in a separate table; see CEPH Data Template 3.2.2. Extramural funding for research or training/continuing education grants should be reported in Templates 3.1.1 (research) and 3.3.1 (funded workforce development), respectively.**

Faculty service is defined and categorized as one of the following: involvement in professional organizations, professional consulting or training, membership on editorial boards and referee panels, or community-based service. During academic years 2012-2014, faculty participated in over 200 service activities as defined above. This is presented in Appendix 3.2.c.1 (CEPH Data Template 3.2.1) located in the Electronic Resource File. SPH faculty are members of numerous professional organizations and affiliated with them through leadership positions. Faculty are affiliated with 84 professional organizations, provide professional consulting and or training for 46 organizations, serve on editorial/review boards or act as referee for 69 journals and grant programs, and have provided service for over 50 community-based organizations.

---

**3.2.d. Identification of the measures by which the school may evaluate the success of its service efforts, along with data regarding the school’s performance against those measures for each of the last three years. See CEPH Outcome Measures Template.**

Outcome measures and targets for services are presented in Table 3.2.d.1 below. The complete listing of faculty service is available in Appendix 3.2.c.1.
### Table 3.2.d.1: Outcome Measures and Targets for Service

<table>
<thead>
<tr>
<th>Outcome Measure</th>
<th>Target</th>
<th>Academic Year 2011-2012</th>
<th>Academic Year 2012-2013</th>
<th>Academic Year 2013-2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of target participants attending the North Texas Health Forum (NTHF)</td>
<td>200 – 250 participants</td>
<td>150 participants (April 2012)</td>
<td>250 participants (April 2013)</td>
<td>230 participants (April 2014)</td>
</tr>
<tr>
<td>Percentage of faculty performing editorial and review duties for journals and agencies</td>
<td>At least 75% of all faculty</td>
<td>82.6% of faculty</td>
<td>80% of faculty</td>
<td>76.7% of faculty</td>
</tr>
<tr>
<td>Percentage of faculty engaged in professional consulting and training</td>
<td>At least 30% of all faculty</td>
<td>41% of all faculty</td>
<td>36% of all faculty</td>
<td>30% of all faculty</td>
</tr>
<tr>
<td>Percentage of faculty participating in professional organizations</td>
<td>At least 95% of all faculty</td>
<td>100% (all faculty)</td>
<td>100% (all faculty)</td>
<td>96.7% of all faculty</td>
</tr>
<tr>
<td>Percentage of faculty participating in community service activities</td>
<td>At least 70% of all faculty</td>
<td>69.6% of all faculty</td>
<td>72.2% of all faculty</td>
<td>66.7% of all faculty</td>
</tr>
</tbody>
</table>

#### 3.2.e. Description of student involvement in service, outside of those activities associated with the required practice experience and previously described in Criterion 2.4.

Students play an active role in many service activities in the Dallas/Fort Worth community. Organization of student participation in service is facilitated by OrgSync which is a university-wide program that is managed through the UNTHSC Student Services Division. It aims to coordinate community service and volunteer opportunities for all students. Their goal is to match students with volunteer opportunities, based on their skills and interests, with consideration for time constraints.

In addition, the Public Health Student Government Association (PHSGA) and its volunteer/service subgroup and the UNTHSC Student Chapter of the Medicine/Public Health Initiative (MPH) have also organized several service opportunities in which students take part. The following is a list of some of the activities in which students have been involved in the last three years.

- **Hispanic Wellness Fair:** Students volunteer their time to the planning of the fair and the day of the event in assisting health care providers and participants and carrying out evaluation of the fair. This fair provides access to health care prevention services and information to those who cannot afford it. Its main objective is to introduce the Hispanic population to the community’s health resources and to break the barriers of communication by introducing health services to participants and building trust among the providers and those in need.
- **Community Health Fairs:** Students volunteer their time for several community health fairs offered by various UNTHSC clinics in collaboration with local health departments.
- **Public Health Week:** Public Health Student Government Association members coordinate several activities during this national awareness week. Past activities have included guest speakers from area public health professionals, community-wide field days, alumni panel discussions, public health related movie screenings, and community service projects.
- **Mentorship Program:** Students have acted as science mentors for middle school students at the Fort Worth Academy.
• **Fort Worth West Nile Virus Program**: A WNV surveillance team with 5 students and a faculty monitors the virus activities in mosquito populations in the City of Fort Worth. Each week the team collects mosquitoes for West Nile virus testing, and provides a recommendation for appropriate interventions based on the exposure risk of West Nile virus in the City. This program has played a role in increasing awareness of and reducing human cases from the deadly West Nile virus in North Texas.

• **Student Outbreak Response Team (SORT)**: The SORT is a student organization that provides support for outbreak and infection control activities in the Dallas/Fort Worth area. This is primarily a SPH organization, with Dr. Witold Migala as faculty representative. The SORT has established numerous partnerships, ones with the Fort Worth Office of Emergency Management, the Emergency Safe Transitions for Elderly Patients (STEP) Project, the Tarrant County Public Health Department Point of Dispensing (POD) program, Vaccination support, Tarrant County Medical Reserve Corps, and the TDHS Region 2/3 Infection Control Committee.

• **Tarrant County Challenge, Inc**: This agency coordinates substance abuse prevention and treatment services for Tarrant County and advocates for the support of these services at the state level. Students assisted in Tarrant County Challenge's successful effort to repeal UPPL provisions in state law. These legal provisions previously impeded the delivery of emergency medical care to persons who were under the influence of alcohol or other drugs.

• **The Gatehouse**: This non-profit agency provides a safe, supportive residential community where women and their children in crisis can live for up to 2.5 years. Gatehouse provides education in vocational and parenting skills, as well as medical and mental health services. Students have volunteered their time to plan, implement, and evaluate agency services.

**SPH Courses**

Several courses contain a “service learning” component that goes beyond the required practicum experience described in Section 2.4. Service learning seeks to foster civic responsibility and encourage community outreach. These courses include:

• **BACH 5310: Participatory Approaches to Improving Community Health**: Student spend the first half of the semester in the classroom understanding the theoretical and methodological foundation of participatory research. In the second half they engage in a variety of exercises demonstrating the interconnections of theory, method, and practice. For example, students have facilitated a Photovoice project with high school students in an underserved community, collaborated with the Morningside Children’s Partnership (MCP) to provide the leadership team and community with a needs assessment of the assets and barriers in MCP, and participated in a community initiative aimed to address safe sleep for babies.

• **BACH 5345: Communication Health Strategies** is another course in which students engage in a community experience. A real client with a communication/media need works closely with students to engage them in the full process of creating a media campaign. For example, students worked with a community program, The Children’s Defense Fund Freedom School, to create media messages regarding healthy behaviors for male teens. Two projects resulted; a message about teen stress and a message about eating healthy.

• **BACH 5350: Community Health Program Evaluation** has two key service learning components. First, all students are required to identify a non-profit organization and contribute a minimum of 15 service learning volunteer hours. They also must use that organization as a basis for their course assignments and share at least two written assignments with the organization. Second, each semester we invite a community organization to be our Empowerment Evaluation partner. Up to 3-4 students are permitted to also select this organization as their service learning site. Representatives from the community partner organization attend 6 class sessions in which the class as a whole works through an
empowerment evaluation process with them. In between class sessions, the service learning team works to complete additional tasks to support the empowerment evaluation project. Organizational representatives include staff, volunteers, consumers, administrators and board members. The goal is to help the organization increase their evaluation capacity through the empowerment model.

- **EOHS 5331: Environmental Sampling:** Enrolled students visit the nearby Paintless Dent Removal Autobody Shop in order to observe safety practices and perform testing of paint for toxic compounds that can cause asthma.

- **HMAP 5342: Leadership and Legislative Policy Experience:** Students spent their 2013 Spring Break in Austin to visit the Texas Legislature. The students tour the Capital Building and meet with state representatives, such as Senator Wendy Davis, while observing meetings of the House and Senate. Students are required to select a current bill to study and track. In 2014, the class traveled to Washington, D.C., in order to better understand the legislative process at the Federal level.

### 3.2.f. Assessment of the extent to which this criterion is met and an analysis of the school’s strengths, weaknesses and plans relating to this criterion.

This criterion is met.

**Strengths:**
The School has strong and growing ties with the Fort Worth and Tarrant County communities, as well as with other communities in the metroplex. SPH faculty are committed to professional service at the local, state, and national level, with more than 95% of SPH faculty participating in professional organizations, and more than two-thirds engaged in community service. The school is frequently called upon to provide assessment and evaluation services for community organizations, which often need to be conducted on a *pro bono* basis. Because of these relationships with numerous organizations, the School has been able to establish field experiences for our MPH and DrPH students that both challenge these students and respond to their practice interests. Moreover, these service relationships have allowed us to expand our CBPR activities in both the Fort Worth and Dallas areas. This mission-centric activity has created for the School and the Health Science Center a reputation as a community player that is committed not only to its own interests but also to the advancement of the area.

**Weaknesses:**
The demands of our faculty for teaching and research at times limits their ability to be as engaged in community activities as they would like to be. This is especially true for our faculty who are in the early stages of their careers for whom teaching and research are the central elements against which they will be judged for tenure and promotion. A uniform reporting system for gathering service activities also needs to be further developed.

**Plans:**
Our plans are to continue to be responsive to the concerns of the community and to address them using our expertise through such mechanisms as the North Texas Health Forum and the BEST program. If we limit our activities only to those areas of interest to the School or the Health Science Center, our reputation as a community asset will suffer, negatively impacting our instructional and research programs.
3.3 WORKFORCE DEVELOPMENT

The school shall offer instructional programs reflecting its stated mission and goals, leading to the Master of Public Health (MPH) or equivalent professional master’s degree in at least the five areas of knowledge basic to public health. The school may offer other degrees, professional and academic, and other areas of specialization, if consistent with its mission and resources.

3.3.a. Description of the ways in which the program periodically assesses the continuing education needs of the community or communities it intends to serve. The assessment may include primary or secondary data collection or data sources.

The School has not conducted a formal assessment of continuing education needs in the metroplex community. It has relied on its intensive engagement in the community through three community advisory groups for feedback on needs: the Center for Community Health Community Advisory Board; the Public Health and Prevention Council, and the MHA Advisory Council. In addition, faculty members of the School, including the Dean, are actively involved in the MAPP process to assess community needs sponsored by Tarrant County Public Health. Also, as indicated in Tables 3.1.c and 3.2.b, school faculty are members of numerous community organizations through which they acquire information on the needs of professionals and other engaged in public health practice.

3.3.b. A list of the continuing education programs, other than certificate programs, offered by the program, including number of participants served, for each of the last three years. Those programs offered in a distance-learning format should be identified. Funded training/continuing education activities may be reported in a separate table. See CEPH Data Template 3.3.1 (ie, optional template for funded workforce development activities). Only funded training/continuing education should be reported in Template 3.3.1. Extramural funding for research or service education grants should be reported in Template 3.1.1 (research) or Template 3.2.2 (funded service), respectively.

Continuing Education Programs are outlined in Table 3.3.b.1. The School of Public Health has participated extensively in workforce development locally and in the State of Texas. The School collaborates with the University of Texas School of Public Health and the Texas A&M School of Rural Public Health in the operation of the Texas Public Health Training Center (TPHTC) and the Texas Preparedness Center.

Texas Public Health Training Center
The Texas Public Health Training Center (TPHTC) provides competency-based training and education in public health. TPHTC is a partnership among local and state health departments and three schools of public health in Texas: the University of Texas School of Public Health, Texas A&M University School of Public Health, and the University of North Texas School of Public Health. Funded through a $3.2 million grant from the Health Resources and Services Administration (HRSA), the TPHTC provides training to thousands of public health professionals across the State of Texas each year in government-sector public health as well as in non-profit organizations; academic institutions; corporations, as well as other sectors; and graduate students in public health and related fields. The Center was unfortunately not selected in the recent funding competition.
Preparedness Center
Funded by the CDC, the Training and Education Collaborative System – Preparedness and Emergency Response Learning Centers (TECS-PERLC) is a collaboration of the three Texas schools of Public Health, led by Texas A&M University. The charge of the TECS-PERLC is to train the existing public health workforce on emerging and existing practices in public health preparedness and emergency response. Though the CDC cut funding for the program in 2012, Texas A&M University has elected to keep the collaborative functional by providing a minimal level of funding to the center sites at UNTHSC and UT Houston. Thus, the UNTHSC site of the TECS-PERLC continues to offer annual medical reserve corps training to the Denton County Public Health Department.

Biostatistics and Evaluation Service and Training (BEST) Center
In addition, the School recently developed the Biostatistics and Evaluation Service and Training (BEST) Center to provide technical training in biostatistics and epidemiology for professionals in the community and others in the Health Science Center. The School has also sponsored for the past seven years the North Texas Health Forum to provide information and opportunities for action by professionals and residents with regard to local public health concerns. Finally, school faculty members have used the Center for Community Health in the Texas Prevention Institute as a mechanism for workforce development programs. These five structures provide a strong, ongoing infrastructure for our activities in this area and have been supplemented by the work of other faculty and staff members when the school has received requests for continuing professional education.

Specific data on the extent of involvement by students and faculty in the programs listed in Table 3.3.b.1 were not collected. Footnotes in the table indicate events (1) where students participated, (2) where faculty participated, and (3) where the event was restricted to an outside audience.
### Table 3.3.b.1: Funded and Unfunded Workforce Development Activities, 2011-2012 to 2013-2014

<table>
<thead>
<tr>
<th>Name of Program</th>
<th>Sponsoring Unit</th>
<th>Key Faculty</th>
<th>Dates/Attendance</th>
<th>Format</th>
<th>Collaborating Organizations (* Funder)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Texas Public Health Accreditation Workshop</td>
<td>School of Public Health</td>
<td>Richard Kurz</td>
<td>October, 2011</td>
<td>100 participants from LHDs interested in accreditation in Austin, Texas</td>
<td>• Texas Association of Local Health Officials</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>100 participants</td>
<td></td>
<td>• Texas Public Health Training Center Public Health Accreditation Council of Texas</td>
</tr>
<tr>
<td>The Future of Community Health: Evidence-based</td>
<td>Texas Public Health</td>
<td>Eduardo Sanchez, Nancy Whitelaw, David Sterling,</td>
<td>November, 2011</td>
<td>109 participants</td>
<td>• Texas Association of Local Health Officials</td>
</tr>
<tr>
<td>Programming and Funding</td>
<td>Training Center</td>
<td>Alan Stevens, Nancy Wilson, Marcia Ory, Jennifer Severance, Anne S. Rafa,</td>
<td>109 participants</td>
<td></td>
<td>• Texas Public Health Training Center Public Health Accreditation Council of Texas</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cindy Quinn, Steve Kelder, Amy Adams, Matthew Smith</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community Health Worker Certification and Continuing</td>
<td>Texas Public Health</td>
<td>Nuha Lackan and TPHTC staff</td>
<td>2011-2014</td>
<td>337 participants</td>
<td>• Health Services and Resources Administration*</td>
</tr>
<tr>
<td>Education</td>
<td>Training Center</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public Health Core</td>
<td>Texas Public Health</td>
<td>Jose Pagan, Robert Kaman, Kristine Lykens, Nuha Lackan, Neda Moayad, Erin</td>
<td>February -</td>
<td>Off-campus, provided the managers and others from Tarrant County</td>
<td>• Tarrant County Public Health*</td>
</tr>
<tr>
<td>Competency Training</td>
<td>Training Center</td>
<td>Carlson</td>
<td>March - May, 2012</td>
<td>32 participants</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>19 participants</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Survival Spanish for Health Professionals</td>
<td>Texas Public Health</td>
<td>Erin Carlson</td>
<td>March - May, 2012</td>
<td>On-campus for UNTHSC Students</td>
<td>• Other UNTHSC Departments</td>
</tr>
<tr>
<td></td>
<td>Training Center</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>North Texas Health Forum - Addressing Community</td>
<td>School of Public Health</td>
<td>Dennis Thombs, Scott Walters, Richard Kurz</td>
<td>April 2012</td>
<td>150 attended</td>
<td>• U of FL College of Medicine</td>
</tr>
<tr>
<td>Alcohol Abuse Problems Through a Public Health Lens</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Mothers Against Drunk Driving</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Tarrant County Challenge</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Other Units of the HSC</td>
</tr>
</tbody>
</table>
### Criterion 3: Creation, Application and Advancement of Knowledge

#### 3.3 Workforce Development

<table>
<thead>
<tr>
<th>Name of Program</th>
<th>Sponsoring Unit</th>
<th>Key Faculty</th>
<th>Dates/Attendance</th>
<th>Format</th>
<th>Collaborating Organizations (* Funder)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2nd Annual Texas Local Health Department Accreditation Workshop</strong></td>
<td>School of Public Health</td>
<td>Richard Kurz</td>
<td>May, 2012 80 participants from LHDs</td>
<td>Off-campus, 2-day conference for LHDs interested in accreditation in Austin, Texas</td>
<td>- Texas Public Health Association*&lt;br&gt;- Texas Department of State Health Services*&lt;br&gt;- Texas Association of Local Health Officials&lt;br&gt;- Texas Public Health Training Center&lt;br&gt;- Public Health Accreditation Council of Texas&lt;br&gt;- CDC*</td>
</tr>
<tr>
<td><strong>UNTHSC Grant Rounds: CHW's and Cultural Competency</strong></td>
<td>Texas Public Health Training Center</td>
<td>Nuha Lackan</td>
<td>April, 2012 50 participants</td>
<td>On-campus session for faculty, staff and students of the UNTHSC</td>
<td>- Texas Department of State Health Services&lt;br&gt;- Other UNTHSC Departments</td>
</tr>
<tr>
<td><strong>Epi Boot Camp</strong></td>
<td>Texas Public Health Training Center</td>
<td>Raquel Qualls-Hampton, Sumi Suzuki, Martha Felini</td>
<td>May, 2012 120 participants</td>
<td>On-campus workshop for faculty, students, public health professionals</td>
<td>- Texas Department of State Health Services&lt;br&gt;- Other UNTHSC Departments</td>
</tr>
<tr>
<td><strong>Public Health Law Workshop</strong></td>
<td>El Paso Health Department</td>
<td>Robert Kaman, Robert Galvin</td>
<td>June, 2012, 2013 45 area public health professionals each year</td>
<td>Off-campus, 1 and a half day workshop in El Paso, Texas</td>
<td>- El Paso Health Department*</td>
</tr>
<tr>
<td><strong>UNTHSC Grant Rounds: Geriatrics</strong></td>
<td>Texas Public Health Training Center</td>
<td>Maudia Gentry</td>
<td>August, 2012 37 participants</td>
<td>On-campus session for faculty, staff and students of the UNTHSC</td>
<td></td>
</tr>
<tr>
<td><strong>Solution Focused Victim Assistance for Domestic Violence</strong></td>
<td>One Safe Place</td>
<td>Emily Spence-Almaguer and Derrelynn Perryman</td>
<td>August 2012, 8 participants</td>
<td>Off campus, 8 hours</td>
<td>- One Safe Place</td>
</tr>
<tr>
<td><strong>Community Health Workers Across Texas: Working Together for Healthy Texas Babies</strong></td>
<td>Texas Public Health Training Center</td>
<td>Maudia Gentry, Jeff Moon</td>
<td>August, 2012 300 participants</td>
<td>Sessions at a three-day conference in Austin, Texas for those interested in infant mortality</td>
<td>- Texas Department of State Health Services</td>
</tr>
<tr>
<td>Name of Program</td>
<td>Sponsoring Unit</td>
<td>Key Faculty</td>
<td>Dates/Attendance</td>
<td>Format</td>
<td>Collaborating Organizations (* Funder)</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------------</td>
<td>------------------------------------------</td>
<td>----------------------------------------------------------</td>
<td>------------------</td>
<td>----------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| Return on Investment and Public Health Advocacy: A TB Case Study in Applied Economics | Texas Public Health Training Center     | Thad Miller, Erin Carlson, Nuha Lackan                   | January, 2013    | Off-campus, 1-day program in Austin, Texas | • HRSA*  
• Texas Department of State Health Services (TDSHS)                                              |
| Public Health Core Competency Training                                           | Texas Public Health Training Center     | Jose Pagan, Robert Kaman, Kristine Lykens, Nuha Lackan, Neda Moayad, Erin Carlson | April, 2013      | Off-campus provided for the managers and others from Tarrant County Public Health                     | • Tarrant County Public Health*                                                                       |
| North Texas Health Forum: Childhood - Obesity: Accomplishments and Challenges     | Texas Public Health Training Center     | Richard Kurz, Heather Kitzman-Ulrich                     | April 2013       | On-campus, Free and open to the professionals and the general public                                 | • Blue Cross and Blue Shield of Texas*  
• Dannon*  
• Fort Worth Independent School District,  
• Health Industry Council  
• City of Fort Worth  
• A B Christian Learning Center  
• Other Units of the HSC                                                                                          |
| 3rd Annual Texas Local Health Department Accreditation Workshop                   | School of Public Health                 | Richard Kurz                                             | May, 2013        | Off-campus, 2-day conference for LHDs interested in accreditation in Austin, Texas                   | • Texas Public Health Association*  
• Texas Department of State Health Services*  
• Texas Association of Local Health Officials  
• Texas Public Health Training Center  
• Public Health Accreditation Council of Texas  
• Public Health Quality Improvement Exchange  
• CDC*                                                                                                               |
| Health Literacy Symposium – Building Health Literate Organizations                | School of Public Health                 | Kathryn Cardarelli, Richard Kurz                         | June 2013        | Off-campus, Free and open to professionals and the general public                                    | • UNTHSC Texas Prevention Institute  
• Area Agency on Aging of Tarrant County*  
• United Way of Tarrant County                                                                                       |
<table>
<thead>
<tr>
<th>Name of Program</th>
<th>Sponsoring Unit</th>
<th>Key Faculty</th>
<th>Dates/Attendance</th>
<th>Format</th>
<th>Collaborating Organizations (* Funder)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural Osteopathic Medical Education and Public Health in Texas Project</td>
<td>Biostatistics and Evaluation Services and Training (BEST) Center</td>
<td>Sharon Homan, Ann Davis, Linda Sterling</td>
<td>2013, 2014</td>
<td>12-hour online/in-class course modules</td>
<td>Texas College of Osteopathic Medicine, HRSA*</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>City of Fort Worth*</td>
</tr>
<tr>
<td>West Nile Surveillance and Response</td>
<td>School of Public Health</td>
<td>Joon Lee</td>
<td>2013, 2014</td>
<td>Off-campus, one half day workshop in Fort Worth, Texas</td>
<td>City of Fort Worth*</td>
</tr>
<tr>
<td>Motivation Interviewing: Helping People Change</td>
<td>Aging and Disability Resource Center, Texas Department of Aging and Disability</td>
<td>Scott Walters</td>
<td>September, 2013</td>
<td>Off-campus, 2 four hour workshops over two days for agency employees Austin, Texas</td>
<td>Aging and Disability Resource Center*</td>
</tr>
<tr>
<td>Biostatistics and SPSS Programming for Epidemiologists</td>
<td>Biostatistics and Evaluation Services and Training (BEST) Center</td>
<td>Sharon Homan, Ann Davis, Opeyemi Jegede</td>
<td>Fall, 2013 and Summer, 2014</td>
<td>On-campus, 2-day conference for local professionals</td>
<td>Texas Department of State Health Services*</td>
</tr>
<tr>
<td>Secondary Analysis of National Datasets Using SAS</td>
<td>Biostatistics and Evaluation Services and Training (BEST) Center</td>
<td>Fei Fei Wei (Faculty member from Arkansas School of Public Health)</td>
<td>November, 2013</td>
<td>On-campus workshop for state and local epidemiologists and students</td>
<td>Texas Department of State Health Services*</td>
</tr>
<tr>
<td>Leadership and Community Collaboration</td>
<td>Biostatistics and Evaluation Services and Training (BEST) Center</td>
<td>Sharon Homan, Kenneth Homan</td>
<td>January-February, 2014</td>
<td>Off-campus, 2-day workshop for Cook Children’s Medical Center outreach team and leadership</td>
<td>Cook Children’s Medical Center*</td>
</tr>
<tr>
<td>Name of Program</td>
<td>Sponsoring Unit</td>
<td>Key Faculty</td>
<td>Dates/Attendance</td>
<td>Format</td>
<td>Collaborating Organizations (* Funder)</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------------</td>
<td>--------------------------</td>
<td>---------------------------</td>
<td>------------------------</td>
<td>----------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| North Texas Health Forum - Built Environment, Lifestyle, and Health            | School of Public Health   | Richard Kurz              | April 2014, 230 attended¹ ² | On-campus, Free and open to the professionals and the general public | • Gamtex Industries  
• United Way of Tarrant County  
• Cook Children’s Medical Center  
• Tarrant County Public Health  
• City of Fort Worth  
• Mental Health Connection  
• Federal Reserve Bank of Dallas  
• Samaritan House  
• UT-A Schools of Architecture, Social Work, and Urban and Public Affairs*  
• Urban Land Use Institute of North Texas  
• Texas Health Resources*  
• AIA Fort Worth Chapter  
• Midwest Texas Chapter of the APA  
• Texas Society of Professional Engineers  
• Other Units of the HSC |
| Health Literacy Symposium – Health Literacy in Tarrant County Adults: A Systems Approach | School of Public Health   | Erin Carlson, Richard Kurz| April 2014 151 attending¹ ² | Off-campus, Free and open to professionals and the general public | • Texas Prevention Center |
| Vital Statistics Summer Conference                                             | School of Public Health   | Richard Kurz              | June 2014 55 attending²   | On-campus, 1-day conference                              | • Texas Public Health Association* |
| Solution Focused Case Management for Victim Services Providers                 | Tarrant County Sexual Abuse Advisory Council Annual Conference | Emily Spence-Almaguer & Derrelyn Perryman | April 2013, 40 attending² | Off campus ½ day conference                              | • Tarrant County Victim Services Association |

¹Students Participated  
²Faculty Participated  
³The event was restricted to an outside audience
3.3.c. Description of certificate programs or other non-degree offerings of the program, including enrollment data for each of the last three years.

Certificate program enrollment is presented in table 3.3.c.1 below. The Certificate in Public Health Practice is designed for individuals who wish to acquire core knowledge and competencies in public health. It consists of the five core courses of the MPH program. Some of these individuals intend to complete the Certification in Public Health Examination. The Geographic Information Systems Certificate is designed to advance participants’ knowledge of mapping, research and spatial analysis as a valuable tool in public health to better understand the geography of disease and its risk factors. Five courses are open to individuals with a relevant background and a bachelor’s degree. The courses included in these certificate programs are provided in Appendix 3.3.c.1 in the Electronic Resource File. Students and other qualified individuals may complete either certificates on-campus or online.

As noted in the table, the School also initiated three new certificates. The Certificate in Global Health consists of three core courses and two electives, selected from a list offered by the School. This certificate is being created in collaboration with the Texas College of Osteopathic Medicine that will provide elective courses for medical students. The Certificate in Food Security consists of five courses that encompass content in the vulnerability of growing, processing, storing, transporting and distributing of food and the risks and effect on population health. The Biostatistics Certificate for Clinical and Health Professionals is formulated for working health professionals who are seeking fundamental knowledge of biostatistics through an online, three course sequence, each course consisting of four semester credit hours. Again the courses included in these certificates are presented in Appendix 3.3.c.1.

The SPH also has students who complete courses as non-degree students; however, this number has declined sharply with the initiation of the Graduate Certificate in Public Health. These students select these courses for several reasons: (1) to acquire knowledge in a public health discipline with bachelor’s degrees from varied universities, (2) as part of the course exchange program that we have established with the Neely School of Business at Texas Christian University, and (3) through relationships with undergraduate or graduate programs at the University of North Texas at Denton.
### Table 3.3.c.1: SPH Certificate and Non-Degree Programs

<table>
<thead>
<tr>
<th>Program Name</th>
<th>Enrollment 2011-12</th>
<th>Enrollment 2012-13</th>
<th>Enrollment 2013-14</th>
<th>Enrollment 2014-May 15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certificate in Public Health Practice</td>
<td>campus: 2</td>
<td>campus: 36</td>
<td>campus: 53</td>
<td>campus: 39</td>
</tr>
<tr>
<td></td>
<td>online: N/A</td>
<td>online: 30</td>
<td>online: 39</td>
<td>online: 33</td>
</tr>
<tr>
<td>Geographic Information Systems (GIS) Certificate</td>
<td>campus: N/A</td>
<td>campus: 6</td>
<td>campus: 3</td>
<td>campus: 2</td>
</tr>
<tr>
<td></td>
<td>online: N/A</td>
<td>online: N/A</td>
<td>online: N/A</td>
<td>online: 0</td>
</tr>
<tr>
<td>Biostatistics Certificate for Clinicians and Health Professionals</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>campus: 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>online: 0</td>
</tr>
<tr>
<td>Graduate Certificate in Food Security and Public Health</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>campus: 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>online: 0</td>
</tr>
<tr>
<td>Graduate Certificate in Global Health</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>campus: 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>online: 0</td>
</tr>
<tr>
<td>Non-Degree – Acquire Knowledge</td>
<td>campus: 32</td>
<td>campus: 19</td>
<td>campus: 13</td>
<td>campus: 13</td>
</tr>
<tr>
<td></td>
<td>online N/A</td>
<td>online: 1</td>
<td>online: 2</td>
<td>online: 0</td>
</tr>
<tr>
<td>Non-Degree – Neely School</td>
<td>campus: 10</td>
<td>campus: 2</td>
<td>campus: 5</td>
<td>campus: 4</td>
</tr>
<tr>
<td></td>
<td>online: N/A</td>
<td>online: 0</td>
<td>online: 1</td>
<td>online: 0</td>
</tr>
<tr>
<td>Non-degree – UNT-Denton</td>
<td>campus: 4</td>
<td>campus: 2</td>
<td>campus: 7</td>
<td>campus: 3</td>
</tr>
<tr>
<td></td>
<td>online: N/A</td>
<td>online: 0</td>
<td>online: 0</td>
<td>online: 0</td>
</tr>
</tbody>
</table>

### 3.3.d. Description of the program’s practices, policies, procedures and evaluation that support continuing education and workforce development strategies.

As indicated above, the School routinely offers continuing education programs and certificate programs to the professional workforce in the Dallas-Fort Worth metroplex as well as the State of Texas. These offering are often free of charge to facilitate participation by individuals from local agencies who have limited funding to participate in such activities. To offer these free or low cost programs, the School has sought support from local foundations, health providers, and other institutions to fund the travel and honoraria of speakers for these sessions and other expenses. If outside sources are not sufficient, the School has provided the additional funding needed to create and deliver these events.

A major collaborator for continuing education is the Professional and Continuing Education (PACE) Office in the Health Science Center. The Office of Professional and Continuing Education is the department responsible for the University of North Texas Health Science Center’s continuing education and professional outreach. Each year, it registers thousands of healthcare providers and awards more than 100,000 credits for public health professionals, physicians, nurses, PAs, pharmacists, certified health educators, social workers and other professionals. PACE provides the following services:

- Turn-key continuing education planning, logistics, accreditation, implementation and evaluation
- Joint sponsorship on activities for physicians, nurses and other healthcare providers
- On-site CME monitoring
Criterion 3: Creation, Application and Advancement of Knowledge  

• Brochure design and print coordination  
• Registration and confirmation services  
• Evaluation and outcomes design  
• Non-accredited (strictly non-promotional) event planning  
• Continuing Education consultation  
• Speaker development  

All continuing education and certificate programs are evaluated using the IDEA Course Evaluation System, which is used for all school courses. IDEA evaluation results are presented in the Electronic Resource File - Appendix 2.1.b.1 and will be available for review during the site-visit.

3.3.e. A list of other educational institutions or public health practice organizations, if any, with which the program collaborates to offer continuing education.

Refer to Table 3.3.b.1.

3.3.f. Assessment of the extent to which this criterion is met and an analysis of the school's strengths, weaknesses and plans relating to this criterion.

The criterion is met.

Strengths:
The School of Public Health in conjunction with many other local, state, and national organizations have provided training to the public health workforce in a timely manner for areas in which there was need as defined by an organization or the public health community. The School has provided funding and/or in-kind support for many of the events described above. As the number of participants indicates, these events were successful in advancing the knowledge and/or skills of a significant segment of the public health workforce. The School has played a special role state wide in the accreditation of local health departments through workshops as well as other activities. The School has also played a key role in training of professionals and community residents with regard to key issues through the North Texas Health Forum which has occurred annually for the past seven years. Finally, the School working with the Texas Public Health Training Center has been a resource for ongoing, certified training for community health workers and for the competency needs of Tarrant County Public Health and the Texas Department of State Health Services.

Weaknesses:
The primary weakness in this area is that the School has not had the resources to conduct a formal workforce development needs assessment. Based on the resources available to it through research and service funding, the School has been able to identify the workforce needs for many groups.

Plans:
The School plans to continue its activities in local, state, and regional training through the Public Health Training Center for the region including Texas, Louisiana, Arkansas, Oklahoma, and New Mexico, although a recent grant to continue this work was not funded. The School will also continue to support the annual North Texas Health Forum to provide information and awareness to the local public health professional community and area residents. Finally, the School has completed planning for three additional certificate programs in food security, global health, and biostatistics and is awaiting funding decisions regarding them from the Health Science Center.